

AMENDMENTS TO THE CLAIMS

1 – 10. (canceled)

11. (previously presented) A method for removing surface contaminants from an air/liquid interface of a semiconductor processing bath for processing semiconductor wafers, said method comprising:

immersing wafers in said semiconductor processing bath;

reducing a volume of said semiconductor processing bath contained within a processing apparatus by rapidly removing from a top of said processing apparatus an upper surface portion of a semiconductor processing fluid present in said bath to rapidly reduce said volume of said processing bath contained within said processing apparatus, while said wafers are immersed in said bath, by opening a valve in said processing apparatus to remove said surface contaminants from said air/liquid interface; and

removing said wafers from said semiconductor processing bath.

12. (canceled)

13. (currently amended) A method for reducing contamination on a semiconductor wafer from a wet etching bath comprising:

immersing said semiconductor wafer in said wet etching bath contained in a processing apparatus;

processing said semiconductor wafer in said wet etching bath by continuously feeding an etching fluid;

stopping the continuous feeding of said etching fluid;

subsequently rapidly reducing a volume of said wet etching bath contained within said processing apparatus by removing an upper portion of said etching fluid from said processing apparatus to reduce an overall volume of etching fluid in said

processing apparatus and remove surface contaminants from an air/liquid interface of said wet etching bath while retaining said semiconductor wafer fully immersed in a lower portion of said etching fluid contained within said processing apparatus; and subsequently removing said semiconductor wafer from said wet etching bath.

~~The method according to claim 9,~~ wherein said upper portion of said etching fluid is removed by sliding a door located at an upper portion of said wet etching bath.

14 – 22. (canceled)

23. (original) A method for etching a semiconductor wafer, said method comprising:

placing an etching fluid into a wet etching vessel;

placing said semiconductor wafer in said etching fluid;

contacting said semiconductor wafer with said etching fluid for a predetermined time; and

rapidly removing a portion of said etching fluid from the upper surface of said wet etching vessel by sliding a door located at an upper portion of said wet etching vessel.

24-51. (canceled)

52. (previously presented) A method for removing surface contaminants from a semiconductor processing bath for processing silicon wafers, said method comprising removing an upper portion of a semiconductor processing fluid present in said bath, while said wafers are in said bath, by sliding a door located at an upper portion of said bath.

53-57. (canceled)

58. (previously presented) A method for etching a semiconductor wafer, said method comprising:

placing an aqueous hydrofluoric acid solution into a wet etching vessel;
placing said semiconductor wafer in said aqueous hydrofluoric acid solution;
contacting said semiconductor wafer with said aqueous hydrofluoric acid solution for a predetermined time; and

removing a portion of said aqueous hydrofluoric acid solution from the upper surface of said wet etching vessel by sliding a door located at an upper portion of said wet etching vessel.

59-62. (canceled)

63. (currently amended) A method for removing surface contaminants from an air/liquid interface of a semiconductor processing bath for processing semiconductor wafers, said method comprising:

immersing said semiconductor wafers in said semiconductor processing bath contained in a processing apparatus;

reducing a volume of said semiconductor processing bath contained within said processing apparatus by rapidly removing an upper portion of said semiconductor processing bath present in said processing apparatus, while said semiconductor wafers are immersed in a remaining lower portion of said semiconductor processing bath, to permit flow of said upper portion of said processing bath out of said processing apparatus and reduce a total volume of liquid contained within said processing apparatus and thereby break eddy currents holding said surface contaminants at said air/liquid interface,

~~The method for removing surface contaminants according to claim 61, wherein~~
said upper portion of said semiconductor processing bath is removed by opening a
valve in said processing apparatus.

64. (canceled)

65. (previously presented) A method for removing surface contaminants
from an air/liquid interface of a semiconductor processing bath for processing
semiconductor wafers, said method comprising:

rapidly removing an upper portion of a semiconductor processing fluid present
in said bath by sliding a door located at an upper portion of said bath, while said
wafers are in said bath, to permit flow of said upper portion of said processing fluid
and thereby break eddy currents holding said surface contaminants at said air/liquid
interface.

66 – 71. (canceled)

72. (previously presented) A method for removing surface contaminants
from an air/liquid interface of a semiconductor processing bath for processing
semiconductor wafers, said method comprising:

rapidly removing an upper portion of a semiconductor processing fluid present
in said bath by sliding a door located at an upper portion of said bath, while said
wafers are in said bath, to permit flow of said upper portion of said processing fluid
and thereby break surface tension forces holding said surface contaminants at said
air/liquid interface.

73 – 77. (canceled)